

CLAIM AMENDMENTS

1. (Previously Presented) A steering control apparatus comprising:
a steering wheel angle detector for detecting a rotation angle of a steering wheel mounted in a vehicle and outputting a steering wheel angle signal;
a road surface reaction force torque detector for detecting a road surface reaction force torque from a front wheel of the vehicle and outputting a road surface reaction force torque signal;
a lag arithmetic part, including a first order lag filter to which the road surface reaction force torque signal is input and which has a specified time constant, for calculating a steering reaction force torque using a signal output by the first order lag filter;
a first motor fixed to the steering wheel for generating the steering reaction force torque applied to the steering wheel;
a first control part for controlling the first motor based on the steering reaction force torque;
a lead arithmetic part, including a first order lead filter to which the steering wheel angle signal is input and which has the same time constant as the first order lag filter, for calculating a steering angle signal of the front wheel using a signal output by the first order lead filter;
a second motor fixed to the front wheel for controlling the front wheel angle; and
a second control part for controlling the second motor based on the steering angle signal.

Claim 2 (Cancelled).

3. (Previously Presented) The steering control apparatus according to claim 1, comprising time constant setting means for changing the time constant of the first order lead filter.

Claim 4 (Cancelled).

5. (Previously Presented) The steering control apparatus according to claim 3, wherein the time constant setting means changes the time constant in accordance with a detection output of a driver state detection device for detecting a state of a driver of the vehicle.

In re Appln. of FUJIOKA et al.
Application No. 10/796,285

Claims 6 and 7 (Cancelled).

8. (Previously Presented) The steering control apparatus according to claim 1, wherein the steering wheel and the front wheel are mechanically coupled with each other.

Claim 9 (Cancelled).

10. (Previously Presented) A steering control apparatus according to claim 1, wherein the time constant is in a range from 0.3 seconds to 0.7 seconds.

Claim 11 (Cancelled).